

**MEMORANDUM OF AGREEMENT
BETWEEN
UNITED STATES DEPARTMENT OF DEFENSE
AND
REPUBLIC OF KOREA MINISTRY OF NATIONAL DEFENSE
CONCERNING
COMMUNICATIONS INTEROPERABILITY AND SECURITY**

PARAGRAPH I

This Memorandum of Agreement (MOA) is entered into between the United States (US) Department of Defense (DoD) and the Republic of Korea (ROK) Ministry of National Defense (MND), referred to as the Sides, in furtherance of the mutual security interests of the US and the ROK, and to promote communications interoperability and security between their respective Armed Forces.

PARAGRAPH II

The purposes of this MOA are to promote tactical communications (comms) systems interoperability between the Armed Forces of the US and ROK; to define policies relating to Configuration Management (CM) of interoperable communications systems, to include Spread Spectrum communications systems, testing thereof, and maintenance of Procedural and Technical Standards; and to provide for secure comms interoperability between the Sides through the provision by DoD of Communications Security (COMSEC) Equipment and Services to MND to protect classified and sensitive national security information and data. The specific policies and procedures addressing each Side's responsibilities under this MOA are set forth in the attached Annexes A and B which form an integral part of this MOA.

PARAGRAPH III

Each Side will carry out its activities under this MOA in accordance with its respective national laws. Financial commitments under this MOA are subject to the availability of funds authorized and appropriated for such purposes by the respective governments.

PARAGRAPH IV

The standards and baseline documents identified at Appendix 1 of Annex A to this MOA and changes to those standards and documents which support CM responsibilities outlined in this MOA and in Annex A will be protected in accordance with the provisions of Annex A.

PARAGRAPH V

MND will bear the cost of reconfiguring its comm systems to achieve or maintain combined US/ROK Armed Forces interoperability. Each Side will bear its own costs of participating in combined testing, as agreed, with each Side being responsible for the costs associated with its portion of the testing. MND will reimburse DoD for any testing assistance that it requests, other than official combined interoperability tests, through Foreign Military Sales (FMS) procedures.

PARAGRAPH VI

Subject to United States Government (USG) release approvals, DoD will provide DoD COMSEC equipment, keying and other materials, and support services to MND in order to satisfy requirements for secure interoperability between US Armed Forces through one or more of the following means as mutually agreed:

- a. FMS procedures will be used to provide by sale or lease COMSEC equipment, keying and other materials, or support services. Procurement through FMS procedures will be pursuant to Letters of Offer and Acceptance (LOA) and in accordance with the Arms Export Control Act. In the event of any inconsistency between an LOA and this MOA, the LOA will take precedence.
- b. Other authorized means, as determined by DoD, may be used to provide COMSEC equipment or materials including keying materials, in order to satisfy short-term DoD/MND secure interoperability requirements.

PARAGRAPH VII

The DoD and MND will establish and operate separate DoD COMSEC accounts dedicated to DoD COMSEC equipment and services provided to the MND. These COMSEC accounts will perform central receiving, temporary storage, and transfer services for DoD-provided COMSEC equipment, documents, and keying material. The DoD COMSEC account will deliver COMSEC equipment and make bulk deliveries of MND keying material to the MND COMSEC account and assist in the further distribution of the material to ROK Services; train MND personnel in the proper custodianship and safeguarding of DoD-provided COMSEC equipment and keying material; and conduct periodic inventories and inspections of DoD-provided COMSEC. The MND will establish, man, furnish, operate, support and sustain the MND COMSEC account to distribute, manage, and control keying material and COMSEC equipment under the DoD COMSEC account's oversight. The details to implement this PARAGRAPH will be established in a separate Annex to this CISMOA.

PARAGRAPH VIII

DoD-provided COMSEC equipment, keying and other materials, and services will be for the exclusive use of MND. DoD-provided COMSEC equipment, keying and other materials, or the details of DoD-provided support services, will not be transferred to or revealed in any manner to a third party without the prior written consent of the USG. DoD-provided COMSEC equipment and materials, including keying materials, will be safeguarded and accounted for in accordance with the procedures prescribed in the current edition of "Safeguarding COMSEC Material and Facilities", (NAG-14 series). NAG-14 establishes the minimum physical security requirements for the handling and safeguarding of classified COMSEC equipment and material.

PARAGRAPH IX

DoD-provided COMSEC equipment and materials, including keying materials, will be installed and maintained only by authorized US personnel. This does not preclude, during periods of operational necessity, the one-for-one replacement of malfunctioning equipment by MND personnel. When authorized by the US, qualified ROK personnel may remove and/or replace US COMSEC equipment previously installed by US personnel. For purposes of

performing required maintenance and periodic inspections, authorized and duly identified US personnel will be permitted timely access to DoD-provided COMSEC equipment and material. DoD will, in cases when time and circumstances permit, notify MND in advance in those instances when access by authorized US personnel is considered necessary. During periods of such access, US personnel will be accompanied by appropriately cleared MND personnel. This does not preclude inspections by MND, which may be performed at any time.

PARAGRAPH X

Only DoD-provided COMSEC keying materials will be used with DoD-provided COMSEC equipment. Only DoD-provided keying materials will be used for DoD/MND bilateral interoperability and for DoD-approved multinational networks involving DoD, MND, and third parties. DoD-provided COMSEC equipment and materials, including keying materials, will not be subject to any cooperative development, co-production, co-assembly or production licensing agreements.

PARAGRAPH XI

Disagreements or disputes between the Sides arising under or relating to the terms, interpretation, or application of this MOA, or any subsequent modification(s), will be resolved solely through mutual consultation between the Sides at the lowest feasible level and will not be referred to any international tribunal or to a third party or persons or entities for resolution or settlement.

PARAGRAPH XII

This MOA may be amended in writing as mutually agreed and executed by authorized representatives of the DoD and the MND. Such amendments will be dated, consecutively numbered, and appended to each copy of this document.

PARAGRAPH XIII

Upon completion of the negotiations and/or documentation required pursuant to PARAGRAPH VII of this MOA, this MOA will supersede any temporary loan or other agreements for COMSEC support made previously between individual services of DoD and MND. Commitments of the Sides concerning security measures, restrictions on use and transfer of equipment, materials including keying materials, or services, and protection of proprietary information will continue irrespective of termination of this MOA or any previous agreements. LOAs and other implementing transactions will be terminated in accordance with their terms.

PARAGRAPH XIV

This MOA will be written and signed in two languages, English and Korean. Each will have equal effectiveness with the respective English and Korean texts certified by official translators to be in agreement. This MOA will enter into force on the date of the last signature and will remain in force for 15 years unless earlier terminated upon six months written notice by one Side to the other Side.

For the
Department of Defense,
United States of America

Ronald M. Bouchard

RONALD M. BOUCHARD
Brigadier General, US Army
Director, Communications Systems
US Pacific Command

Date: 27 Oct 2008

For the
Ministry of National Defense,
Republic of Korea

LEE GYU SANG

LEE GYU SANG
Major General, ROK Army
Director
C4 Directorate

Date: 2008. 10. 27

**ANNEX A TO MEMORANDUM OF AGREEMENT BETWEEN US DOD/ROK MND
CONCERNING COMMUNICATIONS INTEROPERABILITY AND SECURITY**

**SUBJECT: CONFIGURATION MANAGEMENT OF TACTICAL COMMAND AND
CONTROL COMMUNICATIONS STANDARDS**

SECTION I

GENERAL POLICIES AND PROCEDURES

1. The Sides will use US Standards to define interoperability parameters. Baseline documents for standards are defined in Appendices 1 and 2 of this Annex. Provision of technical information or data by the DoD will be subject to US releasability requirements.
2. The Sides will form a technical cooperation group, called the Command and Control Interoperability Board (CCIB). The CCIB will review proposed tactical comms systems interoperability change proposals to the defined baseline standards. The Sides will be equally represented on the CCIB. Meetings will be held at least annually at a mutually acceptable location. The Sides will alternate chairmanship of the CCIB.
3. The CCIB will determine combined interoperability requirements; develop standards and procedures to satisfy interoperability requirements; determine information to be exchanged to support combined comms interoperability, to include spread spectrum issues and systems; determine appropriate training on approved standards; oversee implementation of approved standards; and ensure the maintenance of approved standards through the application of Configuration Management (CM).
4. The Sides will review any proposed change to the defined procedural standards, as well as to baseline technical standards, prior to adoption of such change. Mutual approval is necessary prior to adoption of any change that may affect interoperability. However, MND agrees that US or allied-originated and US approved changes to these standards will be incorporated by ROK MND if ROK MND and US DoD agree the changes are necessary to ensure continued interoperability.
5. A Terms of Reference (TOR) document will be prepared and agreed to by the CCIB. The TOR will provide specific roles, responsibilities, organizational relationships, methods of work, and taskings of the CCIB in support of this MOA.
6. The CCIB will plan, coordinate, and evaluate required testing. Test results will be reviewed by the CCIB along with a test report prepared by the designated test organization. After testing is complete, the CCIB will recommend appropriate action based on the test results.
7. Subject to availability of personnel and resources and subject to authorized use of appropriate FMS cases if required, the Sides will designate office(s) responsible for combined testing; provide systems and personnel necessary to participate in testing in accordance with agreed-to schedules and test plans; fund respective portions of combined testing costs; and implement changes, as required, based on test results.
8. The CCIB will identify the configuration baseline and management documentation that will require maintenance and updates as a result of the CM process; provide procedural, technical, and operational evaluations on all Interface Change Proposals (ICPs); ensure the ICPs are incorporated in appropriate baseline of management documentation; determine the necessity for testing changes and the extent of testing required; recommend approval or disapproval of ICPs to the appropriate MND and DoD authorities; ensure that agreed ICPs are incorporated in

appropriate baseline or management documentation; establish and maintain a configuration status accounting system to track the status of ICPs; and, monitor reports of the use of interoperability standards by operating forces, in order to identify issues requiring corrective action.

9. The Sides will apply combined CM to defined procedural standards and technical standards. The Sides will designate an office responsible for CM; provide qualified personnel to participate in the CCIB; review change proposals and analyze test results; screen all hardware and software changes to participating systems for possible applicability as changes; submit change proposals as required; provide facilities and test units for interoperability and testing; participate in tests and analyze test results in accordance with test plans, procedures, and schedules to be decided by the CCIB; and provide national positions on changes to those procedures and standards that have multinational interoperability impacts. Data and lessons learned as a result of testing will be provided to the other Side and action required as a result of testing will be taken by each Side pursuant to the terms of this MOA.
10. The level of classification of information or data provided in implementation of this MOA will not be higher than SECRET. The ROK MND will ensure that information or data provided under the terms of this MOA will be safeguarded and afforded protection commensurate with prescribed US procedures and standards.
11. Information or data will not be used for the purposes of manufacturing or production of equipment without the prior written consent of the originating Side. Proprietary information or data will not be used or disclosed in any manner that will prejudice the owner's rights in such information or data.
12. The originating Side will identify any information or data provided under the terms of this agreement that is subject to limited rights of use. Information or data subject to limited rights of use or disclosure will not be released to third parties without prior written consent of the originating Side.
13. Information or data provided under this agreement will not be disclosed to any other government, individual organization, or third party, including contractors, without the consent of the originating Side.
14. Receipts will be obtained for all classified information provided; copies of receipts for US classified information will be furnished to the sponsoring service or agency.
15. Nothing in this MOA diminishes or limits any rights that either Side may have acquired in patents, technical data, or copyrights under any other agreements.

APPENDIX 1 TO ANNEX A, CONFIGURATION MANAGEMENT OF TACTICAL
COMMAND AND CONTROL COMMUNICATIONS STANDARDS, MEMORANDUM OF
AGREEMENT BETWEEN US DOD/ROK MND CONCERNING COMMUNICATION
INTEROPERABILITY AND SECURITY

SUBJECT: CONFIGURATION DOCUMENTATION

Documentation under Configuration Management of the US/ROK Command and Control Interoperability Board (CCIB) is an ongoing Agenda Item for those meetings. The attached is a baseline list of mutually-identified and agreed combined configuration items (CIs) for procedural interface standards, as well as other documentation, that are subject to configuration management within the CCIB. This baseline will evolve and the most current list will be included as the US/ROK DOCUMENT STATUS REPORT in the official minutes to the CCIB meetings.

INITIAL BASELINE DOCUMENTS

CPICK MOA	6 Dec 1984
COMSEC MOU	15 Jul 1993
CM MOU	23 Apr 98
CM MOU (ANNEX A, B, C)	23 Apr 98
TOR	20 May 03
CM PLAN	13 Sep 93
CITP 3014 (K)	16 May 01
MIL-STD-6011	1 Aug 02
JMTOP (D)	16 Oct 06
JMTOP (B)	1 Oct 03
MIL-STD-6040	31 Mar 06
MTF User Formats	31 Mar 06
MIL-STD-6016(C) Change 1	Aug 02
MIL-STD-2525 (B), CH 1	July 2005
MIL-STD 6017	1 Mar 04
MIL-STD 6017 Version A	19 Jul 06
Joint Tactical Data Link Management Plan (JTDLMP)	1 Jun 00
CISMOA	DRAFT
MIL-STD-6020	1 Mar 04
MIL-STD 3011	30 Sep 02
MIL-STD 6011B ICPs	14 Nov 05
MIL-STD 6011C ICPs	14 Nov 05
USMTF TRAINING TUTORIAL CDROM	14 Nov 05
NAG-14/NAG-18	9 May 05

APPENDIX 2 TO ANNEX A, CONFIGURATION MANAGEMENT OF TACTICAL
COMMAND AND CONTROL COMMUNICATIONS STANDARDS, MEMORANDUM OF
AGREEMENT BETWEEN US DOD/ROK MND CONCERNING COMMUNICATION
INTEROPERABILITY AND SECURITY

SUBJECT: DEFINITIONS

1. Baseline Documentation. Document(s) formally designated and fixed at a specific time during the life cycle of a configuration item. The document constitutes a baseline where changes must first be approved through an established CM process. Applicable documents include but are not limited to:
 - a. Tactical Command and Control Communications Systems Standards. MIL-STD 6011C (formerly Joint Pub 6-01) contains Joint Tactical Air Operations message standards for Tactical Data Links (TDL) A and B, and MIL-STD 6016C contains message standards for TDL J to achieve compatibility and interoperability between tactical command and control systems. All changes and updates to MIL-STD 6011C and 6016C will be provided to MND. MIL-STD 6040 (formerly Joint Pub 6-04) contains US Message Text Format (USMTF) record and voice message standards for achieving compatibility and interoperability between tactical forces and systems using a message format that is both man and machine readable. All releasable changes and updates to MIL-STD 6040 will be provided to MND.
 - b. Standard Operating Procedures. Provides system compatibility information and detailed functional descriptions and procedures used by operators for establishing and maintaining a procedural standards interface. These documents will be either US Joint Service approved and/or NATO approved Standard Operating Procedures.
 - c. Applicable spread spectrum technical standards baseline documents will be identified as an update when MND requests are forwarded to DoD for foreign release approval.
2. Bit-Oriented Messages (BOMs). Messages that are structured in binary digits, restricting them to machine interpretation since composition and readability by humans requires translation aids. M-Series messages, V/R-Series messages and J - series messages used in TDLs A, B, C and J are examples of BOMs.
3. Change Proposals
 - a. A change proposal recommends a change to the baseline documentation of a standard (e.g., a data link, or data link system implementation of a Technical Interface Specification). Change proposals will be processed according to the procedures agreed upon in the TOR document for the CCIB. The Configuration Management Plan will define the change proposal format requirements and submission process.
 - b. Interface Change Proposal (ICP). A document used to propose a change to procedural interface standards documents and management documents that are placed under CM. As a minimum, an ICP will contain an analysis of impact from the perspective of the submitting nation.
4. Configuration Management (CM). A discipline applying technical and administrative direction and oversight to identify and document the functional and physical characteristics of configuration items (CIs); audit the CIs to verify conformance to specifications, interface control documents, and other contract requirements; control changes to CIs and their related documentation; and record and report information needed to manage CIs effectively.

5. Message Text Format (MTF). A specified sequence of main text set formats having a unique message text format identifier. Formatted messages can be used for voice or record traffic purposes and are intended to be both man and machine readable. MTFs implemented for US use are called USMTFs and are documented in MIL-STD 6040.
6. Procedural Interface Standard. Specifications for the manner of accomplishing the exchange of information across an interface. It defines: (a) the form or format in which information is to be exchanged; (b) the prescribed information exchange language, syntax, and vocabulary to be used in the information exchange; (c) interface operating procedures that govern the information exchange.
7. Tactical Data Link (TDL). A US Joint Staff-approved standardized communications link suitable for transmission of digital information via BOMs, i.e., a joint data link. A TDL is characterized by standardized message formats and transmission characteristics.
 - a. TDL A. A half-duplex secure netted digital data link utilizing parallel transmission frame characteristics and standard message formats at either 1364 or 2250 bits per second.
 - b. TDL B. A full-duplex secure point-to-point data link utilizing serial transmission frame characteristics and standard message formats at 1200 bits per second.
 - c. TDL C. A half-duplex digital data link utilizing serial transmission frame characteristics and standard message formats at 5000 bits per second.
 - d. TDL J. A secure, high capacity, jam resistant, nodeless data link which uses the Joint Tactical Distribution System (JTIDS) or Multifunctional Information Distribution System (MIDS) transmission characteristics and the protocols, conventions, and fixed-length message formats defined by the MIL STD 6016 message standard.
8. Technical Interface Specification (TIS). A document intended primarily for use in defining technical interface characteristics of C3 systems or equipment employed in joint or combined tactical operations. Establishes the baseline documentation for configuration management of C3I systems and equipment interoperability. Describes essential technical requirements that must be met to provide interoperability. Establishes design parameters that will ensure interoperability requirements in tactical C3 employments.
9. Technical Interface Standards. Specifications of the functional, electrical, and physical characteristics necessary to allow the exchange of information across an interface between different tactical comm systems or equipment.
10. Testing. Testing during the life cycle of the interface standards assures that interoperability is maintained. Two types of testing are normally required:
 - a. Operational Maintenance Testing. Tests conducted to ensure that MND systems implementing the procedural and technical standards are interoperable with US systems. These tests will evaluate the degree of interoperability that has been achieved through the implementation of the standard by participating comm systems.
 - b. Requalification Testing. Tests conducted to ensure that systems remain compatible and interoperable following system software changes or additions directly associated with the implementation of these procedural and technical standards.

**ANNEX B TO MEMORANDUM OF AGREEMENT BETWEEN US DOD/ROK MND
CONCERNING COMMUNICATIONS INTEROPERABILITY AND SECURITY**

SUBJECT: PROVISION OF COMMUNICATIONS SECURITY EQUIPMENT AND SERVICES

RESPONSIBILITIES OF THE SIDES

1. The US Department of Defense (DoD) will:

a. Provide releasable and approved DoD COMSEC equipment, keying and other materials, and services to the MND in accordance with PARAGRAPH VI of this MOA in order to satisfy mutually identified US/ROK Armed Forces requirements for secure comms interoperability.

b. Support the MND COMSEC account in accordance with the terms of PARAGRAPH VII of this MOA. Such support will include: (1) orienting MND personnel to procedures required to operate, safeguard, and account for DoD-provided COMSEC equipment and material in accordance with PARAGRAPH VII of this MOA; (2) providing or arranging for the installation and maintenance of DoD-provided COMSEC equipment in accordance with PARAGRAPH IX of this MOA, and; (3) inspecting DoD-provided COMSEC equipment and materials periodically to ensure that they are being handled, used, and safeguarded in accordance with prescribed DoD procedures and standards in accordance with PARAGRAPH VIII of this MOA.

2. The ROK MND will:

a. Ensure that DoD-provided COMSEC equipment and materials including keying materials are safeguarded and afforded protection commensurate with prescribed DoD procedures and standards in accordance with PARAGRAPHS VII through X of this MOA.

b. Provide the funding required to establish, operate and sustain a ROK MND COMSEC account dedicated to the equipment and services provided by the DoD to the MND in accordance with PARAGRAPH VII of this MOA.

c. Establish a centralized system to distribute and account for DoD-provided COMSEC equipment and materials including keying materials in accordance with PARAGRAPH VII of this MOA.

d. In accordance with PARAGRAPH VIII of this MOA, ensure that DoD-provided COMSEC equipment and materials including keying materials are used only for mutually identified US/ROK Armed Forces secure interoperability requirements, and that such equipment and materials are not revealed in any manner to or transferred to a third party unless authorized by the US DoD.

e. In accordance with PARAGRAPH X of this MOA, ensure that only keying materials provided by the DoD are used with DoD-provided COMSEC equipment.

f. In accordance with PARAGRAPH IX of this MOA, arrange for access by authorized and duly identified US personnel to DoD-provided COMSEC equipment and materials including keying materials for necessary maintenance and periodic inspections.

g. Ensure that safeguard procedures established in accordance with PARAGRAPH VIII of this MOA include requirements that emergency destruction procedures are implemented in those

instances where loss or compromise of DoD-provided COMSEC equipment or material appears imminent and that DoD authorities are notified in the most expeditious manner possible of any loss or suspected compromise of DoD-provided COMSEC equipment or material.

h. Provide English speaking personnel to ensure that US COMSEC facilities day to day operations are conducted in English and to act as translators to support the US COMSEC personnel day to day operations.

i. Provide an English speaking escort when US personnel have a requirement to travel to ROK facilities housing COMSEC material and equipment. MND will allow US personnel access to these facilities for such purposes as maintaining, inspecting, and inventorying US provided COMSEC material and equipment. Such access will be permitted within the scope and under guidance provided by the designated ROK personnel.

j. Return all COMSEC equipment, associated materials, destruction certificates, and SF-153's in a timely manner as agreed upon between ROK and US, upon notification by US personnel, and upon deactivation of system or upon termination of this agreement.

3. The Sides will negotiate, agree to, and record the special terms and conditions for each specific DoD/MND COMSEC equipment, modification, and services project. These terms and conditions will be documented in FMS LOAs, or Appendices, and will be appended to this MOA in order to provide a record for the Sides of the COMSEC transactions and commitments between them.

4. In the past, 통신보안장비(Tong-Sin-Bo-Ahn-Jang-Be) was used to refer to both ROK and US COMSEC; however, the term, 통신보안장비 (Tong-Sin-Bo-Ahn-Jang-Be) is no longer used by the ROK military to describe COMSEC. KDIA has instructed the ROK to use "연합암호장비(Yun-Hap-Ahm-Ho-Jang-Be)" to identify US produced COMSEC and "국산암호장비(Kuk-San-Ahm-Ho-Jang-Be)" to identify ROK produced COMSEC. With the intent of maintaining clarity, the US and ROK have agreed to use the Hangul term 연합암호장비(Yun-Hap-Ahm-Ho-Jang-Be) to describe US produced COMSEC released to the ROK.

APPENDIX 1 ANNEX B, PROVISION OF COMMUNICATIONS SECURITY EQUIPMENT AND SERVICES, MEMORANDUM OF AGREEMENT BETWEEN US DOD/ROK MND CONCERNING COMMUNICATIONS INTEROPERABILITY AND SECURITY

SUBJECT: EQUIPMENT AND SERVICES TRANSITION

1. COMSEC and Controlled Cryptographic Items (CCI) equipment originally released to the ROK at no cost for use will continue to be provided at no cost for use, with the exception of any current and future sustainment, maintenance, and replacement. COMSEC and CCI equipment originally released to the ROK at no cost for use continues to remain the property of the US and the ROK will abide by all applicable security requirements identified in this MOA.